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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,281	04/17/2002	Paul Meinander	MEINANDER-8	2874

1444 7590 07/02/2003

BROWDY AND NEIMARK, P.L.L.C.
624 NINTH STREET, NW
SUITE 300
WASHINGTON, DC 20001-5303

EXAMINER

HALPERN, MARK

ART UNIT	PAPER NUMBER
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1731

8

DATE MAILED: 07/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/980,281

Applicant(s)

MEINANDER, PAUL

Examiner

Mark Halpern

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

Claim Objections

- 1) Dependent claims 2-7 should start with – The - in place of “An”.
- Dependent claims 9-10 should start with – The - in place of “A”.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 2) Claims 1-11, are rejected under 35 U.S.C. 103(a) as being unpatentable over Meinander (5,861,052) in view of Pelzer (4,030,897).

Claims 1, 4-5, 7-9: Meinander discloses an apparatus and process for separating gas from liquid that includes a hollow tubular rotor 12 with an fluid inlet 14 at one end 18 and a liquid outlet 22 at the other end, and a gas exhaust 44 in the center of the apparatus. The opposite end 22 includes a stationary pump housing 16. The central part of rotor 12 forms a rotatable elongated tubular gas separation part 30. Due to rotation of rotor 12 and centrifugal forces, gas separates from the liquid, liquid surrounds the inner wall 36 of the rotating separator and exits from liquid outlet 22 at a pumping pressure, gas forms a gas column at center 38 and exits via center shaft 44. The operation is especially well suited for the gas-free re-cycling of backwater drained

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through a forming fabric in a papermaking process (Abstract, col. 5, line 24 to col. 7, line 43, and Figure 1). Meinander fails to disclose that the rotor comprises a turbine at its outlet end. Pelzer discloses a centrifugal degassing of liquids device that includes a turbine 49 at one of the ends of the device. It would have been obvious, to one skilled in the art at the time the invention was made, to combine the teachings of Meinander and Pelzer, because such a combination would provide for efficient separation at relatively small consumption of energy in the design of Meinander as disclosed by Pelzer (col. 1, lines 56-65).

Claims 2, 10: energy recovery from the turbine is disclosed (Pelzer, col. 3, lines 45-54).

Claim 3: the turbine is rotating with the rotor as shown in Figure 2 of Pelzer.

Claim 6: blades and their configuration are disclosed in Figures 2a, 2b, 3a, of Meinander.

Claim 11: a papermaking process is disclosed wherein stock is fed through a head box 100 onto a forming wire, forming a web. Backwater draining through the forming wire is collected in drainage boxes 101, suction boxes 102 and suction roll 103 and flows directly into gas separation pumps 10, 10' and 10". The gas separation pumps separate the air contained in the backwater and feed the backwater as separate air free flows to various points in the primary fiber process (Meinander, col. 11, lines 13-63 and Figure 6). Detailed centrifugal degassing operation of backwater is disclosed above under claim 1.

Conclusion

3) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Halpern whose telephone number is 703-305-4522. The examiner can normally be reached on Mon-Fri, (9:00-5:30).

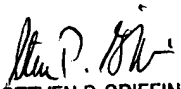
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 703-308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7718 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

MK

Mark Halpern
Patent Examiner
Art Unit 1731

June 24, 2003


STEVEN P. GRIFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700